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This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

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46. (Currently Amended) A labelled nucleic acid compound having the formula:

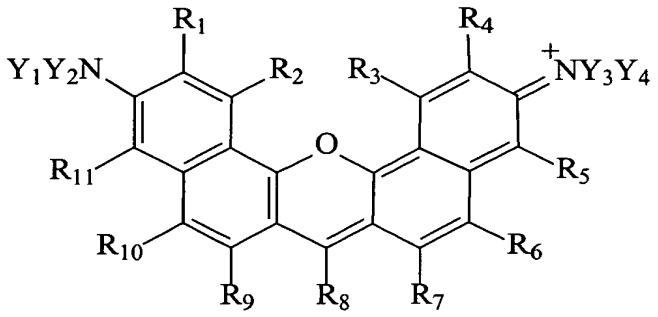
NUC—L—D

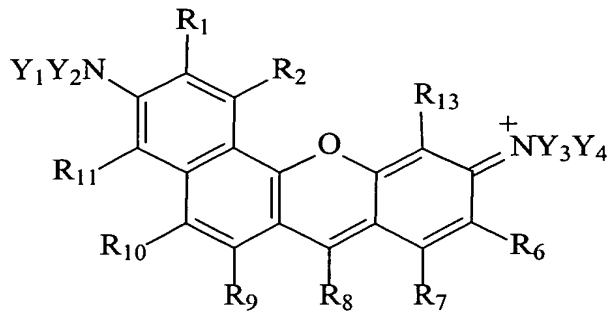
wherein

NUC is a nucleic acid compound selected from the group consisting of a nucleoside, a nucleotide, a polynucleotide and analogs thereof;

L is a linkage; wherein if NUC comprises a purine base, the linkage is attached to the 8-position of the purine, if NUC comprises a 7-deazapurine base, the linkage is attached to the 7-position of the 7-deazapurine, and if NUC comprises a pyrimidine base, the linkage is attached to the 5-position of the pyrimidine; and

D is an extended rhodamine dye comprising one of the following structures:





wherein

R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_9, R_{10}, R_{11}, and R_{13} when taken alone are each independently selected from the group consisting of –H, alkyl, alkyl independently substituted with one or more Z_1, heteroalkyl, heteroalkyl independently substituted with one or more Z_1, aryl, aryl independently substituted with one or more Z_1, heteroaryl, heteroaryl independently

substituted with one or more Z_1, arylalkyl, arylalkyl independently substituted with one or more Z_1, heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1, halogen, $-OS(O)_2OR$, $-S(O)_2OR$, $-S(O)_2R$, $-S(O)_2NR$, $-S(O)R$, $-OP(O)O_2RR$, $-P(O)O_2RR$, $-C(O)OR$, $-NR_2$, $-NR_3$, $-NC(O)R$, $-C(O)R$, $-C(O)NR_2$, $-CN$, and $-OR$, wherein each R is independently selected from the group consisting of –H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group; or

R_1 taken together with R_2, Y_1, or Y_2; and/or

R_4 taken together with R_3, Y_3, or Y_4; and/or

R_5 taken together with R_6, Y_3, or Y_4; and/or

R_6 taken together with R_7, Y_3, or Y_4; and/or

R_{10} taken together with R_9 or R_{11}; and/or

R_{11} taken together with Y_1, or Y_2; and/or

R_{13} taken together with Y_3 or Y_4 are selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1, heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1, aryleno, aryleno independently substituted with one or more Z_1, heteroaryleno, and heteroaryleno independently substituted with one or more Z_1;

R_8 is selected from the group consisting of –H, alkyl, alkyl independently substituted with one or more Z_1, heteroalkyl, heteroalkyl independently substituted with one or more Z_1, aryl, aryl independently substituted with one or more Z_1, heteroaryl, heteroaryl independently substituted with one or more Z_1, arylalkyl, arylalkyl independently substituted with one or more Z_1, heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1;

Y_1, Y_2, Y_3, Y_4 when taken alone are independently selected from the group consisting of –H, alkyl, alkyl independently substituted with one or more Z_1, heteroalkyl, heteroalkyl independently substituted with one or more Z_1, aryl, aryl independently substituted with one or more Z_1, heteroaryl, heteroaryl independently substituted with one or more Z_1, arylalkyl, arylalkyl independently substituted with one or more Z_1, heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1; or

Y_1 taken together with R_1, R_{11} or Y_2; or

Y_2 taken together with R_1, R_{11} or Y_1; or

Y_3 taken together with R_4, R_5, R_6, R_{13} or Y_4; or

Y_4 taken together with R_4, R_5, R_6, R_{13} or Y_3 are selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1, heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1, aryleno, aryleno independently

substituted with one or more Z_1, heteroaryleno, and heteroaryleno independently substituted with one or more Z_1; and

each Z_1 is independently selected from the group consisting of –R, halogen, –$OS(O)_2OR$, –SO_2OR, –SO_2R, –SO_2NR, –S(O)R, –$OP(O)O_2RR$, –$P(O)O_2RR$, –CO_2R, –NR_2, –NR_3, –NC(O)R, –C(O)R, –$C(O)NR_2$, –CN, –O and –OR, wherein R is independently selected from the group consisting of –H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group.

47. (Original) The labelled nucleic acid compound of claim 46 wherein

Y_1 is taken together with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1; or

Y_2 is taken together with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1; or

Y_3 is taken together with R_4 or R_5 or R_6 or R_{13} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1; or

Y_4 is taken together with R_4 or R_5 or R_6 or R_{13} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1.

48. (Original) The labelled nucleic acid compound of claim 47 wherein the C_2 or C_3 substituted alkyleno is gem disubstituted with C_1–C_3 alkyl.

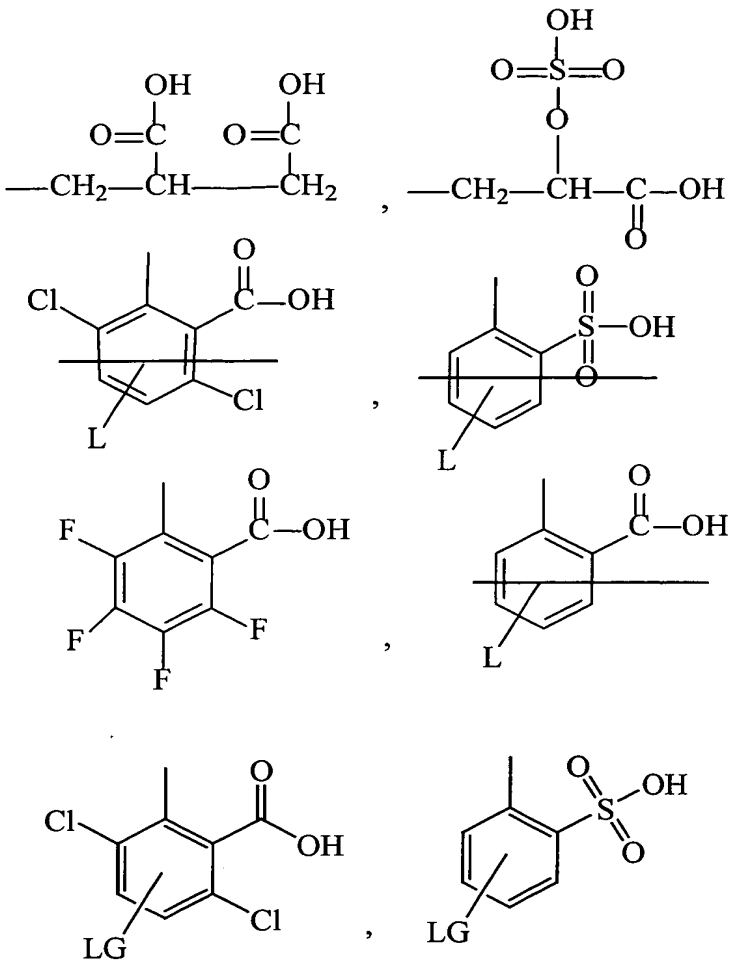
49. (Original) The labelled nucleic acid compound of claim 47 wherein the C_2 or C_3 substituted alkyleno is gem disubstituted with methyl.

50. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein R_8 is alkyl independently substituted with one or more substituents selected from halogen, –C(O)R, and –$S(O)_2R$ wherein R is independently selected from–OH, O-alkyl, -NH_2, N-alkyl and a ~~linkage~~ linking group.

51. (Original) The labelled nucleic acid compound of claim 46 wherein R_8 is –CF_3.

52. (Original) The labelled nucleic acid compound of claim 46 wherein R_8 is aryl or aryl independently substituted with one or more Z_1.

53. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein R_8 is selected from the structures:

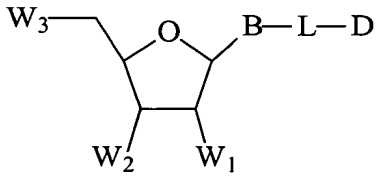


B1 cont

wherein ~~L~~ LG is a ~~linkage~~ linking group.

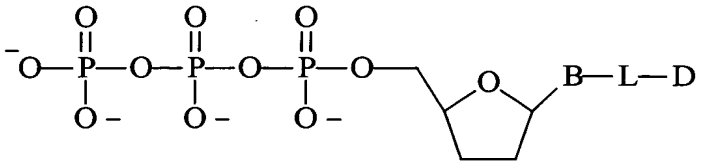
54. (Original) The labelled nucleic acid compound of claim 46 wherein NUC comprises a nucleobase selected from uracil, cytosine, deazaadenine, and deazaguanosine.

55. (Original) The labelled nucleic acid compound of claim 46 having the structure:



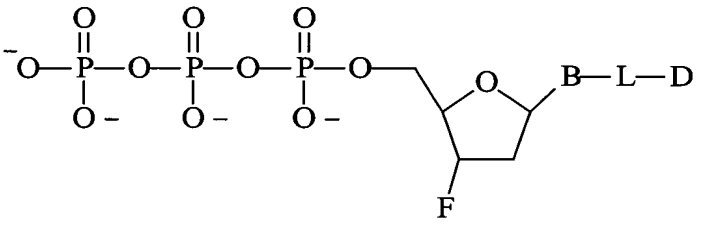
wherein B is a nucleobase; W_1 and W_2 taken separately are selected from –H, –OH, and –F; and W_3 is selected from –OH, monophosphate, diphosphate, triphosphate and phosphate analog.

56. (Original) The labelled nucleic acid compound of claim 46 having the structure:



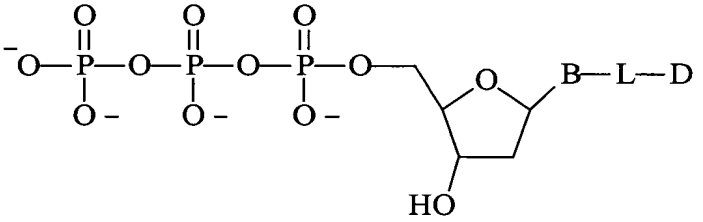
wherein B is a nucleobase.

57. (Original) The labelled nucleic acid compound of claim 46 having the structure:



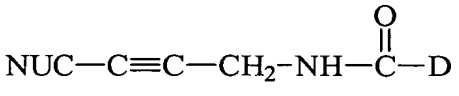
wherein B is a nucleobase.

58. (Original) The labelled nucleic acid compound of claim 46 having the structure:



wherein B is a nucleobase.

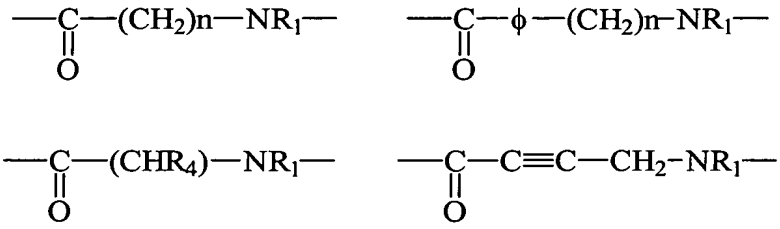
59. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein L is attached to a nucleobase of NUC and to D ~~in~~ to form the structure:



60. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein L is attached to a nucleobase of NUC and to D ~~in~~ to form the structure:

$$NUC—C\equiv C—CH_2OCH_2CH_2NR_3X—D$$

wherein R_3 is selected from –H and (C_1–C_6) alkyl; and X is selected from the structures:



where n ranges from 1 to 5; ϕ is aryldiyl; and R_1 is selected from –H, (C_1–C_6) alkyl and protecting group.

61. (Original) The labelled nucleic acid compound of claim 46 wherein L is attached at R_8 of D.

62. (Cancelled)

63. (Original) The labelled nucleic acid compound of claim 46 wherein NUC is a polynucleotide and L is attached to the polynucleotide at a position selected from the 5' terminus, the phosphodiester backbone, a nucleobase, and the 3' terminus.

64. (Currently Amended) The labelled nucleic acid compound of claim 63 wherein L ~~is~~ comprises an aminohexyl ~~linkage~~ linking group, NUC is a polynucleotide and L is attached to the polynucleotide at the 5' terminus.

65-75. (Cancelled)